



# NORLITE, LLC

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March 07, 2013

Karen M. Gaidasz, CPESC  
Environmental Analyst  
New York State Department of Environmental Conservation  
Region 4  
1130 North Westcott Road  
Schenectady, NY 12306-2014

RETURN RECEIPT REQUESTED VIA EMAIL

Mr. Kenneth Eng  
Air Compliance Branch  
United States Environmental Protection Agency  
Region 2  
290 Broadway  
New York, NY 10007-1866

RETURN RECEIPT REQUESTED VIA EMAIL

Re: Norlite Corporation-MACT Excessive Exceedance Report  
Kiln 1: 02/07/13- 03/07/13  
Kiln 2: 01/31/13- 03/07/13

Dear Sirs/Madam:

In accordance with 40 CFR 63.1206(c)(3)(vi), the Norlite Corporation (Norlite) is submitting an "Excessive Exceedance Report" for the timeframe of 01/31/13 thru 03/07/13. The attached document explains each of the "malfunctions" for Kiln One and Two.

The results of the investigation concluded a majority of the exceedances were a result of the 1 second time delay cutoff limit of -0.00 inches of water column associated with the negative backend chamber pressure. The majority of the cutoffs were associated with sudden fuel flow changes from controlling flow rates with valves while having higher LGF Line Pressures. The potential for this type of upset was increased because the primary air fan which creates the draft for the system was partially plugged with dust. The partial blockage decreased the efficacy of the rear chamber system for handling sudden pressure changes in the kiln system. The primary air fan has been clean and has been put on a routine preventative maintenance program to help ensure future blockages do not occur. Norlite and its consultant will continue to evaluate each cutoff in an effort to reduce the number of cutoffs which occur.

All of the malfunctions that occurred were consistent with our Startup, Shutdown and Malfunction Plan (SSMP). As approved by the NYSDEC on February 6, 2006, these reports are being sent electronically.



# NORLITE, LLC

Should you have any questions regarding this letter, please contact me at (518) 235-0401 or email at: [tom.vanvranken@tradebe.com](mailto:tom.vanvranken@tradebe.com).

Sincerely,

*Thomas Van Vranken*

Thomas Van Vranken  
Environmental Manager

## Attachments

ecc: Don Spencer, NYDEC – R4 w/attachments  
James Lansing, NYSDEC – CO w/attachments  
Joe Hadersbeck, NYSDEC – R4w/attachments  
Tita LaGrimas, Tradebe w/attachments



NORLITE, LLC  
MACT EXCEEDANCE REPORT - KILN 1  
02/07/13 - 03/07/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
2/18/2013	7:49:56	2/18/2013	7:56:53	0:06:57	55	Malfunction	The LGF Feed Pump Stopped, Causing a Loss of Flame Which Caused a Pressure Pulse in the Kiln System That In Turn Affected the Frontend Kiln Differential Pressure	Front Kiln Pressure, 1 Second Delay	Opl	Restarted LGF Pump and Adjusted Cooler Fans
2/19/2013	2:56:00	2/19/2013	2:56:48	0:00:48	56	Malfunction	Instantaneous Upper Instrument Setpoint Reached at LGF Flow Span Due to the LGF Pump Stopping and Pulsing, Causing the LGF Fuel Flow to Surge	LGF Flow	Span	After Attempting to Restart the LGF Pump, the Kilns Were Switched to a Different Tank
2/19/2013	3:24:05	2/19/2013	3:24:52	0:00:47	57	Malfunction	Instantaneous Upper Instrument Setpoint Reached at LGF Flow Span Due to the LGF Pump Stopping and Pulsing, Causing the LGF Fuel Flow to Surge	LGF Flow	Span	After Attempting to Restart the LGF Pump, the Kilns Were Switched to a Different Tank
2/19/2013	3:24:56	2/19/2013	3:25:17	0:00:21	58	Malfunction	Instantaneous Upper Instrument Setpoint Reached at LGF Flow Span Due to the LGF Pump Stopping and Pulsing, Causing the LGF Fuel Flow to Surge	LGF Flow	Span	After Attempting to Restart the LGF Pump, the Kilns Were Switched to a Different Tank
2/19/2013	4:46:54	2/19/2013	5:22:15	0:35:21	59	Malfunction	Instantaneous Upper Instrument Setpoint Reached at LGF Flow Span Due to the LGF Pump Stopping and Pulsing, Causing the LGF Fuel Flow to Surge	LGF Flow	Span	After Attempting to Restart the LGF Pump, the Kilns Were Switched to a Different Tank
2/21/2013	17:32:48	2/21/2013	17:33:40	0:00:52	60	Malfunction	Kiln Operators Were Using Valves to Control Fuel Flow. A Fuel Flow Surge was Experienced Due to High LGF Line Pressure Which Caused a Pressure Pulse in the Kiln System / Tank Switch	Front Kiln Pressure, 1 Second Delay	Opl	Adjusted Fuel Flow and LGF Line Pressure
2/26/2013	13:01:18	2/26/2013	13:02:57	0:01:39	61	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Scrubber pH Span	Scrubber pH	Span	Adjusted Scrubber pH
3/5/2013	15:14:26	3/5/2013	15:15:37	0:01:11	62	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Scrubber pH Span	Scrubber pH	Span	Adjusted Scrubber pH
3/5/2013	17:31:08	3/5/2013	17:57:52	0:26:44	63	Malfunction	Instantaneous Upper Instrument Setpoint Reached for LGF Flow Span Due to the End of the Burn Tank Being Reached	LGF Flow	Span	Switched Burn Tanks and Re-established Fuel Flow
3/5/2013	17:31:08	3/5/2013	17:57:52	0:26:44	64	Malfunction	The Primary Air Fan Which Creates Draft for the Rear Chamber System Stopped Which Caused A Loss of Differential Pressure.	Back Chamber Pressure, 1 Second Delay	Opl	The Primary Air Fan Was Cleaning and Placed Back In Service



NORLITE, LLC  
MACT EXCEEDANCE REPORT - KILN 2  
01/31/13 - 03/07/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
2/7/2013	9:48:28	2/7/2013	12:37:15	2:48:47	38	Malfunction	The Gas Pilot Was Lost Which Caused A Loss of Flame Which Caused a Pressure Pulse In the Kiln System Which Affected the Rear Chamber System./ No Visible Emissions / High CO's	Back Chamber Pressure, 1 Second Delay	Opl	Restarted the Pilot and Established Fuel Flow
2/7/2013	15:13:13	2/7/2013	15:16:25	0:03:12	39	Malfunction	The Gas Pilot Was Lost Which Caused A Loss of Flame Which Caused a Pressure Pulse In the Kiln System Which Affected the Rear Chamber System./ No Visible Emissions / High CO's	Back Chamber Pressure, 1 Second Delay	Opl	Restarted the Pilot and Established Fuel Flow
2/8/2013	0:35:30	2/8/2013	0:35:55	0:00:25	40	Malfunction	The Kiln Operator was Controlling LGF Fuel Flow With Valves and High LGF Line Pressure Which Caused a Fuel Flow Surge. This Triggered a Pressure Pulse in the Kiln that Affected the Rear Chamber System / No Visible Emissions	Back Chamber Pressure, 1 Second Delay	Opl	Adjusted LGF Line Pressure and LGF Flow
2/8/2013	3:46:41	2/8/2013	4:47:38	1:00:57	41	Malfunction	Inconsistent Flow Rate Due to Controlling Flow With Valves and High Line Pressure Caused a CO Spike to Occur	Carbon Monoxide	Opl	Adjusted Pressures and Cleared the Valves
2/9/2013	4:11:05	2/9/2013	4:12:09	0:01:04	42	Malfunction	The Kiln Operator was Controlling LGF Fuel Flow With Valves and High LGF Line Pressure Which Caused a Fuel Flow Surge. This Triggered a Pressure Pulse in the Kiln that Affected the Rear Chamber System / No Visible Emissions	Back Chamber Pressure, 1 Second Delay	Opl	Adjusted LGF Line Pressure and LGF Flow
2/9/2013	4:13:10	2/9/2013	4:14:49	0:01:39	43	Malfunction	The Kiln Operator was Controlling LGF Fuel Flow With Valves and High LGF Line Pressure Which Caused a Fuel Flow Surge. This Triggered a Pressure Pulse in the Kiln that Affected the Rear Chamber System / No Visible Emissions	Back Chamber Pressure, 1 Second Delay	Opl	Adjusted LGF Line Pressure and LGF Flow
2/9/2013	4:15:35	2/9/2013	5:16:03	1:00:28	44	Malfunction	Previous Back Chamber Cutoff Caused System Instability Which Caused CO's to Rise	Carbon Monoxide	Opl	Adjusted Fuel Flow
2/14/2013	21:57:22	2/14/2013	21:57:57	0:00:35	45	Malfunction	The Kiln Operator was Controlling LGF Fuel Flow With Valves and High LGF Line Pressure Which Caused a Fuel Flow Surge. This Triggered a Pressure Pulse in the Kiln that Affected the Rear Chamber System / No Visible Emissions	Back Chamber Pressure, 1 Second Delay	Opl	Adjusted LGF Line Pressure and LGF Flow
2/15/2013	6:57:09	2/15/2013	7:13:08	0:15:59	46	Malfunction	The End of the Burn Tank Was Reached Which Caused the Flame to Pulse Which Caused a Pressure Pulse Which Affected the Rear Chamber System/ No Visible Emissions	Back Chamber Pressure, 1 Second Delay	Opl	Switched Burn Tanks and Re-established Fuel Flow
2/19/2013	4:46:43	2/19/2013	4:58:10	0:11:27	47	Malfunction	Instantaneous Upper Instrument Setpoint Reached for LGF Flow Span Due to the End of the Burn Tank Being Reached Which Caused a Sudden Surge / Tank Switch	LGF Flow	Span	The Burn Tank Was Switched and Fuel Flow Re-established
2/21/2013	6:04:51	2/21/2013	6:26:53	0:22:02	48	Malfunction	A Large Aggregate Ball Opened the Cooler Door Which Caused A Momentary Decreased In Frontend Kiln Differential Pressure	Front Kiln Pressure, 1 Second Delay	Opl	Removed the Aggregate Ball From the Cooler



NORLITE, LLC  
MACT EXCEEDANCE REPORT - KILN 2  
01/31/13 - 03/07/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
2/22/2013	12:32:20	2/22/2013	15:19:50	2:47:30	49	Malfunction	Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Due to the Probe Being Damaged	Stack Gas Flow Rate	Span	The Probe Was Replace With A Spare Probe
2/27/2013	22:57:58	2/28/2013	0:03:07	1:05:08	50	Malfunction	Inconsistent Fuel Flow From Inconsistent LGF Pump Pressures Caused the CO's to Rise	Carbon Monoxide	Opl	Adjusted the LGF Fuel Pump to Prevent Pressure Fluxuations
3/4/2013	9:49:58	3/4/2013	9:50:20	0:00:22	51	Malfunction	The Kiln Operator was Controlling LGF Fuel Flow With Valves and High LGF Line Pressure Which Caused a Fuel Flow Surge. This Triggered a Pressure Pulse in the Kiln that Affected the Rear Chamber System / No Visible Emissions	Back Chamber Pressure, 1 Second Delay	Opl	Adjusted LGF Line Pressure and LGF Flow